1. **Load the following dataset**

typ polutanty

město 5,82

město 4,4

město 7,11

město 7,39

město 5,86

město 6,54

město 5,6

město 6,28

město 5,46

město 5,15

město 5,82

město 5,21

město 7,11

město 5,53

město 5,32

vesnice 9,35

vesnice 6,61

vesnice 8,84

vesnice 6,42

vesnice 4,63

vesnice 7,23

vesnice 5,84

vesnice 4,78

vesnice 4,78

vesnice 8,39

vesnice 4,74

vesnice 9,81

vesnice 2,11

vesnice 7,22

vesnice 4,63

1. **Calculate the Shapiro-Wilk test** for both groups separately, determine the p-value.
2. f the p-value is less than 0.05 in at least one case, use the **Wilcoxon test** to compare the means of both groups. If this condition is not met, proceed to the next step.
3. Compare the variances in both groups using the **var.test()**. Determine the p-value and remember it.
4. Compare the means in both groups using the **t-test**. If the p-value from the variance test is higher than 0.05, set the argument var.equal=T, if it's lower than 0.05, set the argument var.equal=F.
5. Determine the p-value of the **t-test**. If it is lower than 0.05, find out and write yourself whether it's better to live in a village or in a city.
6. If the p-value is higher than 0.05, write: "**It doesn't matter whether you live in the city or the village, you'll all die anyway, fools.**". Print the final output in bold and very large font.